Exercises to the lecture

Machine learning and Pervasive Computing

Assignment 1: Feature computation and test design

In this assignment, you are asked to decide for a class to detect/distinguish from signal-strength information, to collect data, to train a classifier on the data and to compute statistics on the performance of the classifier. The class to be detected can be chosen according to your preference. For this,

a) From the data file provided containing WiFi strength measurements (data_exercise_150506.txt) compute suitable feature values.

b) Following one of the test designs discussed in the lecture, create separate training and testing sets.

c) Finally, train a decision tree classifierwith the data and

d) compute the classification performance utilising one of the metrics introduced in the lecture (e.g. IS, Brier, AUC, F_1).